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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/670,114

09/24/2003

Akihiko Mochida

17049

7178

23389

7590

06/02/2009

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EXAMINER

CZEKAJ, DAVID J

ART UNIT

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2621

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/670,114	<b>Applicant(s)</b> MOCHIDA ET AL.	
	<b>Examiner</b> DAVID CZEKAJ	<b>Art Unit</b> 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 5,6 and 9-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5,6 and 9-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

On pages 8-9, applicant argues that Karasawa fails to disclose a drive circuit within an image pickup system of an endoscope apparatus, and thus fails to disclose the second drive circuit as well. While the applicant's points are understood, the examiner respectfully disagrees. The examiner is interpreting the endoscope apparatus as the insertion tube and any necessary processing circuitry needed for the endoscope to operate properly. See for example Karasawa figure 2 and column 3, lines 10-50. There Karasawa discloses that the CCD drive circuit 25a is part of the image pickup system enclosed in the scope processor 5a. Since the drive circuit is in the scope processor, the drive circuit is part of the endoscope apparatus. Therefore the rejection has been maintained.

On page 10, applicant argues that Kimura fails to disclose the reading signal generating circuit is provided in the image pickup system of an endoscope apparatus. While the applicant's points are understood, the examiner respectfully disagrees. See for example Kimura figure 1. There Kimura illustrates a reading signal generating circuit being part of the image pickup system. Kimura further discloses in column 5, lines 45-55, that the reading circuit is in the electronic endoscope unit. Since the reading unit is in the endoscope unit, the reading unit is provided in an endoscope apparatus. Therefore the rejection has been maintained.

On pages 9-10, applicant argues that Takahashi fails to disclose a frequency dividing circuit is within an image pickup system of an endoscope apparatus and thus

fails to disclose the first and second frequency dividing circuit. While the applicant's points are understood, the examiner respectfully disagrees. See for example Takahashi figure 7. There Takahashi discloses a frequency dividing circuit 50, being part of block 42. As seen in Takahashi figure 2, block 42 is part of the image pickup system. Since block 42 is part of the image pickup system, the frequency dividing circuit is within an endoscope apparatus. Therefore the rejection has been maintained.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 5-6 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karasawa (US 5,196,928) in view of Kimura et al. (4816909), (hereinafter referred to as "Kimura") in further view of Takahashi et al. (6466256), (hereinafter referred to as "Takahashi").

Regarding claims 9-10, Karasawa discloses "an image pickup system for capturing the image of a subject" (Karasawa: figure 1), "an image pickup element with one image-capture surface constructed with scanning lines and driven by a pickup drive signal, wherein each of the scanning lines comprise a first number of pixels" (Karasawa: Column 3, Lines 38-42), "a drive circuit for generating and output the drive signal comprising a first frequency" (Karasawa: Column 3, Lines 47-65), "a line memory which can store one line of signals read from pickup element" (Karasawa: Column 3,

Lines 47-65), “performing video signal processing on the signals stored in the line memory” (Karasawa: Column 3, lines 35-47; column 4, lines 29-47), and “a writing signal for writing to the line memory” (Karasawa: column 3, lines 45-51). However, Karasawa fails to disclose reading a signal with a second frequency which is higher than the first frequency and the frequency dividing circuit as claimed. Kimura teaches that prior art endoscope systems must have many picture elements in a small device (Kimura: column 1, lines 28-33). To help alleviate this problem, Kimura discloses “a drive signal comprising a first frequency based on the first number of pixels” (Kimura: column 4, lines 25-40) and “reading a signal with a second frequency which is higher than the first write frequency” (Kimura: column 6, line 53 - column 7, line 32. The examiner notes that read signals must have a higher frequency the write signals). Takahashi teaches that feeding a digital signal to a remote peripheral is not expedient (Takahashi: column 2, lines 25-26). To help alleviate this problem, Takahashi discloses an apparatus comprising an “oscillator for generating a clock signal having a preset frequency, the oscillator is provided in a camera control unit to which the endoscope is removably connected” (Takahashi: column 9, line 57 – column 10, line 5; column 7, lines 5-7, wherein the oscillator is part of the video processor which is connectable to the endoscope) and “a frequency dividing circuit which divides the clock signal to generate a signal for the drive circuit” (Takahashi: column 10, lines 1-5, wherein the frequency dividing circuit is the frequency demultiplier). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Karasawa, add the different frequencies taught

by Kimura, and add the processing taught by Takahashi in order to obtain an apparatus that can accurately adjust a clock signal to correctly display a video signal.

Regarding claim 5, most of the limitations of the claim have been discussed in the above rejection of claim 10. Karasawa also teaches of the video signal processing means has an enlarge/reduce processing function for performing horizontal enlargement or reduction (Karasawa : Column 5, Lines 1-8) and Takahashi teaches the reduction is based on a ratio between the first and second frequency (Takahashi: column 10, lines 35-49).

Regarding claim 6, although not disclosed, it would have been obvious to superimpose an input image with the captured image (Official Notice). Doing so would have been obvious in order more easily provide information to a user.

Regarding claim 11, most of the limitations of the claim have been discussed in the above rejection of claim 10. Karasawa also teaches of adding a second image pickup unit, which shows greater detail than the first but with all the circuitry mentioned above (Karasawa : Column 2, Lines 58-68).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID CZEKAJ whose telephone number is (571)272-7327. The examiner can normally be reached on Mon-Thurs and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dave Czekaj/

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Primary Examiner, Art Unit 2621